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How Valid is International Keynesianism?

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Abstract

The paper asks whether demand expansion by one country would benefit its trading partners, this idea being "international Keynesianism." Provided the conditions for short-term "domestic Keynesianism" exist, the argument is valid when exchange rates are fixed. But with flexible exchange rates one country can expand unilaterally without its current account deteriorating; nevertheless, there is a case for "international Keynesianism Mark II" because one country's expansion is likely to improve the terms of trade of others, and so reduce their inflationary pressures. International Keynesianism provides one basis for international policy coordination proposals, but other approaches are also discussed.

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Summary

The paper discusses the circumstances in which a demand expansion by one country benefits its trading partners by allowing them to expand demand and output, this idea being called "international Keynesianism." It is assumed that "domestic Keynesianism" applies--that domestic demand expansion can, at least in the short run, increase domestic output and employment.

The argument is clearly valid when exchange rates are fixed: one country may be prevented from expanding demand unilaterally because of adverse effects on its current account. This constraint is reduced or removed when others expand. But the case for international Keynesianism seems to disappear with flexible rates. Any one country can expand demand to the extent it wishes and associate this with exchange rate depreciation to avoid undesired current account consequences. Hence, as is well known, floating rates do give countries some aggregate-demand policy independence even though they do not insulate countries from links through trade and the capital market.

It is noted in Keynes's General Theory that a demand expansion leading to higher employment is associated with a decline in real wages, something that is currently very relevant but is often forgotten.

A case is then built up for "international Keynesianism Mark II" applying to a flexible exchange rate system where one country's expansion improves the terms of trade of others. Hence it raises the others' real wages for given employment, and so allows more demand expansion than otherwise--that is, it increases employment without real wages having to fall to the extent that would be necessary if they had expanded unilaterally. Inflationary pressures will then be less than with unilateral demand expansion.

Finally, the possible need for international macroeconomic policy coordination is briefly discussed. The idea can be given at least three meanings, namely information exchange, mutual policy modification, and current account compatibility. The second interpretation suggests that each country might modify its policies at least marginally to benefit the others and finally they might all be better off. This argument can rest on international Keynesianism Mark II as expounded above. One country's expansion generates a favorable spillover for other countries through the terms of trade; in the absence of coordination their combined expansion would be below the optimum.

I. Introduction

It is often argued that U.S. demand expansion and the U.S. current account deficit have been "supporting" world demand and hence output and employment outside the United States. A country that runs a deficit is said to be making a "contribution" to the world economy while Japan and Germany, with their surpluses, are failing to do so and deserve some reprimand. More generally, even when current accounts stay constant, it is sometimes argued that economic expansion in one country benefits its trading partners by allowing them to expand, this being the so-called "locomotive theory." Similarly, a country that contracts demand is damaging its neighbors. All this is believed to be true even when exchange rates float or are readily adjusted since all the recent discussions have taken place in a floating exchange rate context.

I shall call this line of thought "international Keynesianism." It can be decomposed into two elements. First, there is "domestic Keynesianism", namely the view that management of aggregate nominal demand for domestically produced goods and services is possible, and can affect domestic output and employment over a worthwhile or significant period: a rise in demand raises output while not bringing about an offsetting reduction later. Secondly, there is the international aspect: the benefits of demand expansion spill over abroad. Here I shall focus on the second aspect since the first aspect will be discussed in other papers at this conference. If there is no sound case for domestic Keynesianism then presumably there will be no case for its international extension. 1/

II. International Keynesianism Mark I

In the 1960s international Keynesianism--what I shall call the Mark I version--seemed obvious. The validity of domestic Keynesianism was of course assumed, as were fixed exchange rates. If there was unemployment and excess capacity the appropriate policy for any one country was to expand aggregate nominal demand. Some of the extra demand would spill over into imports, and also possibly into domestic demand for goods that might otherwise be exported, so that a balance of payments problem might emerge. The argument as it used to be put was that a surplus country did not really have a balance of payments constraint and possibly not even a target. It needed to worry only about its "internal balance" target.

1/ On the subject of domestic Keynesianism (defined here as a policy approach) I am completely pragmatic. In some circumstances this approach is appropriate for a short-run period that is long enough to be worthwhile to justify some demand management policies. Above all, it depends on labor market conditions. Probably it is currently less appropriate for Keynes' own country (where real wages keep on rising sharply when there is more than 10 percent unemployment) than for some others, such as the United States.

Nor, for that matter, did the United States have a constraint even if she was in deficit because of the willingness of other countries to hold dollars. The constraint was faced by countries other than the United States which were below their internal balance targets only because unilateral demand expansion would create a balance of payments problem for them. It was certainly the standard British view that Britain was normally in this position.

For a country like Britain a problem of inadequate demand could then be resolved by demand expansion abroad. If her trading partners expanded demand this would raise British exports, bring Britain closer to the internal balance target and put her current account into surplus. If she then supplemented the foreign demand expansion with some domestic demand expansion she could move even closer to the internal balance target while the current account surplus would be eliminated. Hence, concerted demand expansion would allow Britain to move closer to or even attain internal balance while maintaining external balance. The essential point was that any country that expanded aggregate demand would be likely to modify or remove the balance of payments constraint for other countries and hence would be doing these other countries a service. This was the essence of international Keynesianism.

If one recalls that the foreign country which British commentators usually had in mind was Germany, the persistent surplus country in the 1960s, one realizes how history repeats itself. Now the Americans rather than the British are urging Germany to expand. The present position is not that the United States wishes to engage in domestic demand expansion but rather that she wishes to improve her current account position without having to depart from internal balance. It is worth mentioning the similarity here only to justify the rather thorough exposition of Mark I international Keynesianism.

III. A False Trail: The Monetary-Fiscal Policy Mix

At one stage there seemed to be a way out of the dilemma, a way out that did not require departing from the fixed exchange rate assumption but that was actually a false trail. This was the Mundellian monetary-fiscal policy mix approach.

A country that wished to expand demand unilaterally without creating a balance of payments problem was recommended to combine fiscal and monetary policy so that on balance the interest rate would rise and sufficient capital inflow would be attracted to finance the current account deficit resulting from the net aggregate demand expansion. There were now two instruments--fiscal policy and monetary policy--aimed at the two targets of internal and external balance. External balance was defined now as referring not to the current account but rather to the overall balance, which took into account private capital flows.

This approach implied that only the overall balance mattered--i.e., that external balance required that the reserves did not have to be run down or the government did not have to borrow abroad. A government that started with the situation described above (unemployment and external balance as redefined) and followed this prescription would be borrowing on the domestic market to finance its budget deficit while the private sector would be borrowing abroad to finance the current account deficit. In effect the budget deficit would be financed abroad. In the presence of an international capital market the current account is indeed no longer the absolute constraint it used to be, but this is about as far as one can go in regarding this approach as a solution to the central problem. The Mundellian policy-mix approach ignores the implications of sustained budget and current account deficits.

IV. The Solution: Flexible Exchange Rates

The obvious solution was seen to be to allow the exchange rate to float or at least to allow it to become an instrument of policy. For a given aggregate demand level abroad, a country that wished to expand domestic demand would be free to do so once it could also depreciate the exchange rate so as to maintain the current account at a desired level. A "switching" policy as well as an expenditure-increasing policy was required. The point seemed obvious and is still obvious. This was the classic argument for flexible exchange rates.

Floating or flexible exchange rates do give countries some independence. Germany may refuse to expand demand either because it believes it has already attained internal balance or because it simply does not believe in domestic Keynesianism. But this need not prevent the United States from expanding demand while maintaining a constant current account. It is necessary only to ensure that the dollar depreciates at the same time. Of course it may not be possible to attain a precise current account outcome in the short-run; changing elasticities over time, J-curves and such like, have to be taken into account. But a combination of U.S. monetary and fiscal expansion could bring about both depreciation and the required demand expansion.

It seems to follow that while we may retain a belief in domestic Keynesianism, there is no longer any justification for international Keynesianism when exchange rates can be altered or float.

The present situation is that the United States wishes to see her current account deficit reduced while maintaining internal balance at home. This requires fiscal contraction in the U.S. to reduce aggregate demand and monetary expansion to depreciate the exchange rate. Sufficient depreciation may already have taken place and we may just be waiting for its effects. The decline in demand for U.S. goods and services resulting from the fiscal contraction would be offset by the switching of the pattern of demand away from foreign goods toward domestic goods resulting from the depreciation. Monetary expansion would also affect aggregate demand (through lower interest rates stimulating investment) while fiscal contraction may contribute to the depreciation. In any case, U.S. policy alone, using two instruments of policy, could improve the current account while maintaining internal balance.

If the United States engaged in fiscal contraction so as to reduce or even eliminate the current account deficit German and Japanese export industries would certainly suffer from a decline in demand and, with aggregate demand in Germany and Japan given, the outcome would be deflationary in both countries. But this does not provide support for international Keynesianism. If the German and Japanese authorities believed in domestic Keynesianism and managed their policy instruments flexibly so as to maintain internal balance they could expand domestic demand to compensate for the loss of foreign demand. For example, fiscal expansion in these countries could compensate for fiscal contraction in the United States.

This may sound a little naive since many considerations have clearly been ignored here. Firstly, the German and Japanese authorities may not believe in domestic Keynesianism. They may believe that any domestically-generated demand expansion would stimulate inflationary expectations, and hence is to be avoided. Thus they may feel unable to replace foreign with domestic demand. Secondly, even if they do expand domestic demand, the pattern of demand would change from tradables to non-tradables, and the Japanese and German export industries do have reason to be grateful to the United States and other countries that have made it possible for Germany and Japan to run current account surpluses for prolonged periods.

Nevertheless, one conclusion surely stands. Suppose we adhere to the simplest Keynesian approach, namely that in the presence of involuntary unemployment and excess capacity an increase in demand for domestically-produced goods and services would increase domestic output and employment and that this general result is independent of any changes in real wages that might eventuate. Then flexible or floating exchange rates do provide a kind of aggregate-demand policy independence and hence destroy the basis for international Keynesianism Mark I. For any given macroeconomic policies abroad, and allowing for lags and the usual fine-tuning problems, it is open to the monetary and fiscal authorities in any country to manage the level of nominal demand for the goods and services of their own country as they wish. But the qualification about real wages is not minor and provides the clue to the later step in the argument which will provide the foundation for international Keynesianism Mark II.

It has become trite to point out that flexible exchange rates do not insulate countries from their trading and investment partners. There are still links through trade and through the capital market. Demand expansion by Germany and Japan might improve the U.S. terms of trade. Furthermore it might raise or lower world interest rates, and so affect interest rates in the United States. It may affect the relative profitability of tradable and non-tradable industries in the United States. But this does not alter our main conclusion.

When one says that with flexible exchange rates, demand expansion abroad is not necessary to allow demand expansion at home one is not asserting that flexible exchange rates create complete insulation. But for any given terms of trade and given world interest rates, or for any given world reaction functions, they allow the United States or any other country to follow domestic policies of expansion or contraction which (given time for adjustment) could maintain the current account at a desired level. Of course the world reaction functions must not be such as to prevent the desired current account outcome, and this is a matter that I shall come to later.

V. An Interlude: Keynesianism and Real Wages

Before going on to international Keynesianism Mark II an interlude about the relationship between Keynesian policies and real wages is necessary.

In The General Theory a nominal demand expansion was assumed to raise prices relative to nominal wages. The neo-classical diminishing returns assumption was built into the model. The increase in employment resulting from demand expansion therefore involved a decline in real wages. 1/ It seems indeed a very neo-classical and, in current terms, non-Keynesian conclusion to suggest that employment can only increase if real wages fall. The novelty of Keynes' analysis relative to its neo-classical alternative was that the required decline in real wages was assumed not to be attainable by a decline in nominal wages, either because the latter were rigid downwards or because, for dynamic reasons, a decline in nominal wage would lead to a faster fall in nominal demand. Hence nominal demand expansion was required to increase employment.

This aspect of the model--that extra employment required a fall in real wages--was not given any significance in The General Theory. Apart from a brief reference to the Australian policy of wage indexation, the question of real wage rigidity downward did not arise. Furthermore, the model which came to be subsequently accepted as Keynesian and which appeared in most textbooks, assumed constant costs and mark-up pricing. This might be called the "popular Keynesian model," as distinct from the "General Theory model." In this model, which Keynes himself seemed subsequently to accept, real wages might vary during the cycle but not along standard neo-classical lines. In particular, extra employment did not necessarily involve a decline in real wages.

Today we should realize that the General Theory Model is far more appropriate than the popular Keynesian model. Normally, demand expansion

1/ This feature of The General Theory has sometimes been forgotten. See pp. 17-18 and many other places, especially Chapter 19. ". . . in general, an increase in employment can only occur to the accompaniment of a decline in the rate of real wages" (Keynes (1936), p. 17).

will raise output and employment only if real wages fall as a result, at least relative to trend and other than in the very short run. The Keynesian policy conclusion that nominal demand expansion can increase employment follows if prices are more flexible upwards than are nominal wages. If nominal wages were sufficiently flexible downwards in response to labor market conditions nominal demand expansion would not be needed to increase employment, while if nominal wages adjusted rapidly upwards to maintain real wages at their initial level, nominal demand expansion would fail to increase employment.

All this is very relevant when we consider the open economy with a flexible exchange rate. Suppose that constant costs and mark-up pricing really did apply to home-produced goods, as was believed--or at least assumed in the popular Keynesian model--for so long. With given nominal wages unilateral demand expansion would lead to increased output and employment. In addition it would have to lead to depreciation of the exchange rate to avoid the current account deterioration that would otherwise result. The depreciation would raise the domestic price level and thus reduce real wages. 1/

While we have made here the popular Keynesian assumption of constant costs and mark-up pricing, for the open economy with a flexible exchange rate we have obtained the important General Theory result that an increase in employment requires a fall in real wages. The reason is that demand expansion leads to depreciation and the depreciation lowers real wages. If the General Theory assumption of diminishing returns actually applied to home-produced goods and services in general (as I believe that it does) the conclusion that unilateral nominal demand expansion has to lower real wages if it is to increase employment is strengthened by introducing the exchange rate effect.

It follows that if there were explicit or implicit wage indexation, so that nominal wages rose sufficiently for real wages to be restored in due course, a general rise in nominal demand would not lead to a sustained rise (or possibly any rise) in employment. Finally the wage and price levels would rise sufficiently to restore the original level of real demand and the real exchange rate.

We have considered two extreme cases of wage behaviour. At one extreme the nominal wage is completely rigid; an expansion of demand will then increase employment and the fact that it happens also to lower real wages is just incidental and, in fact, hardly relevant for macroeconomic policy. At the other extreme, the real wage is rigid; Keynesian demand

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1/ With international capital mobility it may not be necessary to avoid a current account deterioration, at least in the short run, since capital inflows can finance a deficit. This is the Mundellian argument discussed above. Demand expansion can take the form of fiscal expansion, which would actually appreciate the exchange rate. The point here is that if the current account is not to deteriorate, there has to be a depreciation.

expansion policy cannot then affect employment. The final step is to introduce the familiar intermediate situation, where a demand expansion successfully causes prices to rise ahead of wages but wages follow with a lag.

Continuous nominal demand expansion can then keep real wages lower than otherwise, at least for some time, until the labour market adjusts. A short-term "Phillips curve" trade off between employment and inflation then emerges. (This depends, among other things, on the length of wage contracts and on the "rationality " of expectations in the labour market.) If the nominal wage increase in any given period is closely related to the gap between actual and desired real wages anything that lowers actual real wages at a given level of employment--such as depreciation of the exchange rate--worsens the trade off. This last point lays the foundations for international Keynesianism Mark II.

VI. International Keynesianism Mark II

International Keynesianism Mark I applied to a world of fixed exchange rates. Even in that world exchange rates were not absolutely fixed. Britain did devalue twice and France four times. But one could regard the commitment to fixed exchange rates as rather strong. International Keynesianism Mark II applies to a world where exchange rates between major currencies float or are readily adjusted, but where large depreciations are usually regarded as undesirable.

Any country can certainly expand nominal demand unilaterally while maintaining the current account at an initial level. Given capital mobility, this would be brought about by some combination of fiscal and monetary expansion. 1/ But this would involve depreciation of its currency and lower real wages and--given some responsiveness of nominal wages to prices and, in turn, prices to wages--would increase inflation. The key point now is that if the country's trading partners expanded demand at the same time, the depreciation might be avoided. Thus the authorities of a country where there is a deficiency of demand are likely to welcome demand expansion by its partners. The more other countries expand at the same time the less the currency depreciates when the

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1/ Fiscal expansion on its own would worsen the current account and monetary expansion on its own would normally improve it, in the latter case because of the depreciation induced by lower interest rates. If monetary expansion worsened the current account in spite of the depreciation it induces because a sufficient increase in domestic investment was stimulated by the lower interest rates, then fiscal expansion would need to be accompanied by some monetary contraction. (This simple approach could be complicated by the development of inflationary expectations. Agents in the markets may think that the demand expansion will not be once-and-for-all, or that the starting point is not a Keynesian situation of unemployment and excess capacity.)

country's own demand is expanded, and thus the less inflation there would be at home for a given increase in employment.

This is the basis for the "locomotive theory" where expansion by one large economy makes it easier for others to expand. Demand expansion by Germany and other countries increases demand for U.S. goods and so raises employment in the United States. But this is not a sufficient reason for the United States to welcome German expansion since employment at home could have been increased by expansion of domestic (rather than foreign) demand. There is no need to wait upon Germany. This was the message of the case for flexible rates expounded above. The point of international Keynesianism Mark II is that unilateral U.S. expansion would lead to depreciation of the dollar if the current account is not to deteriorate, hence to a decline in the U.S. terms of trade, to a fall in real wages and thus to "inflationary pressures"--i.e., increases in nominal wages requiring further expansion of nominal demand to sustain the rise in employment, and so on.

International Keynesianism Mark II welcomes a foreign demand expansion not because it avoids a current account deterioration that might otherwise result from domestic expansion (as with international Keynesianism Mark I) but because it avoids depreciation and hence adverse terms of trade and real wage effects. It results from a situation where depreciation is permitted and indeed happens all the time, but where it is considered to have adverse effects.

Many of the normative arguments that apply to the world of fixed exchange rates thus also apply, though in a much modified form, to the world of floating rates. Countries can engage in unilateral demand expansion--and often do--and since the exchange rate can depreciate they can avoid a balance of payments constraint. Hence concerted international expansion is certainly not essential. But unilateral expansion involves some costs to the expanding country--essentially deteriorating terms of trade and real wages--that can be avoided by concerted expansion. Of course, these arguments for concerted expansion come from those who believe in domestic Keynesianism.

VII. Is There a Need for International Macroeconomic Policy Coordination?

The popular concept of macroeconomic policy coordination can actually be given at least three meanings. First, it can refer to information exchange, secondly it can refer to (what might be called) "mutual policy modification", and thirdly it can refer to "current account compatibility". The second version rests upon international Keynesianism Mark II, and seems to follow directly from the preceding discussion.

1. Information exchange

In the first case the aim is to ensure that governments are aware of the policies others intend to embark upon, so that they can make their own adjustments to aggregate demand in good time. For example, the United States may intend to engage in fiscal contraction with the aim of reducing her current account deficit. This is likely to have a contractionary effect in other countries and would then call for monetary or fiscal expansion (or both) there. If other countries were concerned about maintaining internal balance and believed in domestic Keynesianism they would need no urging to pursue such policies; they would just require notice that there is a need for the policies, bearing in mind the lags in the fine-tuning process.

The following point with regard to coordination is sometimes made. It is argued that the U.S. current account deficit needs to be reduced. Therefore, it is said, in the United States the excess of expenditures over incomes needs to fall and in other countries (i.e., primarily Germany and Japan) expenditures need to increase relative to incomes. Coordination is then interpreted to mean that both sides make the appropriate expenditure adjustment, the United States reducing her fiscal deficit and the others increasing theirs. The implicit assumption is that incomes in both countries stay constant--i.e., that internal balance is maintained. The U.S. policy change does then require to be accompanied by an explicit German or Japanese policy change essentially because of the internal balance targets.

On the other hand, no explicit policy changes in the other countries would be needed if they were not concerned with internal balance. A reduction of the U.S. budget deficit would improve the U.S. current account even if fiscal policies and money supplies had stayed constant in the other countries. This assumes that the other countries do not have current account targets of their own but accept the U.S. target. (The case where many or all countries have current account targets will be discussed later.) The reduced interest rate resulting from the U.S. fiscal contraction would lead to some rise in investment in Germany and Japan. In addition the appreciation of their currencies brought about by the U.S. fiscal contraction would have deflationary effects (probably not offset by the effects of higher investment), so that savings would fall. The combination of higher investment and lower savings would produce reductions in German and Japanese current account surpluses. But this would be achieved at the cost of deflation in these countries.

The conclusion is that coordination in the form of information exchange is needed when countries have the maintenance of internal balance as an objective of policy. They have to believe in domestic Keynesianism. Policy adjustments take time to arrange and to take effect, so that it is certainly desirable that governments get notice of policy shocks coming from abroad. Furthermore, if the United States is to adjust her own monetary policies appropriately to fit in with a given fiscal policy change she needs to know what the German and Japanese monetary and fiscal policy responses will be.

2. Mutual policy modification

The second interpretation of the concept of international macroeconomic policy coordination is the one that is usually given in the theoretical literature on this subject. As there is such an extensive literature it is only discussed briefly here. 1/ It is assumed that in the absence of coordination governments do have the necessary information but that they follow policies that are in their own narrow interests and neglect adverse or favorable spill over effects (externalities) on other countries. They do take into account the expected effects on themselves of foreign repercussions resulting from the original policy changes, but do not take into account the interests of other countries. There is then scope for countries to strike mutually beneficial bargains: each might modify its policies at least marginally to benefit the other and finally they might all be better off--i.e., there could be a Pareto improvement.

Various examples of this possibility can be given, and can be found in the theoretical literature. The spill over effect might concern exchange rate stability. A country that destabilises the exchange rate--either depreciating or appreciating it temporarily--may be generating an adverse spill over (external diseconomy) by the very fact of creating instability and uncertainty, or through the redistributive effects that go with exchange rate variations. Here the case can be considered which is most relevant for the present discussion, namely the spill over that follows from international Keynesianism Mark II, and which has been the basis for one particular advocacy of macroeconomic policy coordination.

In a world of flexible or floating exchange rates, the basic idea, as already discussed, is that any large country that expands its economy while aiming to maintain its current account unchanged will improve the terms of trade of other countries (through appreciation of their exchange rates), hence allows their real wages to rise for given employment, and thus improves their inflation-employment trade offs. The other countries then feel freer to expand themselves. Thus one country's expansion generates a favorable spill over for other countries. There is positive transmission of economic expansion. Negative transmission is conceivable in special circumstances, but the usual presumption is that transmission is positive. The expanding country acts as "locomotive" for others. If they all expand together real exchange rates and hence terms of trade may not need to change much, if at all. Unless there is coordination each country will ignore the benefits that it creates for its neighbors through such expansion, and therefore it will expand less than would be optimal for the world as a whole.

This particular argument for coordination rests completely on international Keynesianism Mark II. As expounded more fully in the new

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1/ See Cooper (1984) and various contributions in Buiter and Marston (1985). The discussion in this section is based mainly on my own contribution in Buiter and Marston (1985).

literature of international coordination theory, in the absence of coordination an equilibrium might be attained where each country assumes the others' policies given (a Nash equilibrium). Of course, the assumption that in the absence of coordination policy makers in one country would always assume that policies in another country are given (i.e., that these would be independent of their own actions) is itself rather crude. Game theory suggests complicated dynamic interactions in the absence of coordination. In any case, coordination can generally lead to an outcome where all participating countries are better off (a Pareto improvement). 1/

3. Current account compatibility

A third concept of coordination concerns the achievement of current account targets that are mutually compatible. It is worth noting that this concept or objective is not directly connected with the issue of *international Keynesianism. Therefore it is only introduced here for* completeness. Apart from having their internal balance targets, conceivably all countries could also have current account targets. The discussion so far assumed that only some countries have such targets or constraints. Clearly they cannot all achieve absolute targets independently chosen. This used to be called the n-1 problem. It was said that countries other than the United States could and did have targets (though not with regard to bilateral balances) while the United States was the "nth" country that balanced the system by not having a target. The need for coordination arises if there is no "nth" country willing to accept the current account outcome implicit in other countries' targets, or if some of the targets are bilateral. This issue is of particular interest at present because there is indeed widespread concern in the United States about her current account position and prospects, and some policy proposals imply a degree of "current account targeting," even of a bilateral character.

To highlight the issue and also relate it to the previous discussion, let us imagine a two-country situation where the United States wishes to eliminate her current account deficit but Japan does not wish to give up

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1/ Strictly one should say that coordination can lead to an outcome where all participating governments consider themselves to be better off as a result. Given that the governments may have the "wrong" models or social welfare functions (however defined) one cannot be sure that the outcomes would be objectively better.

This qualification takes into account the possibility that there are differences of view--i.e., differences in implicit models or in social welfare functions--among governments or as between governments and the "objective" independent observer, and also that the interests of governments and their citizens might differ. If governments were prone to be too expansionary from a national-interest point of view--being held back in their expansionism only by the fear of depreciation of the exchange rate--then the net effect of coordination as analyzed here might be adverse.

her surplus. We assume flexible exchange rates and capital mobility. Both countries have internal balance targets of their own.

Suppose the United States reduced her fiscal deficit and (if necessary) compensated with some monetary expansion to maintain internal balance at home. If there is no policy change in Japan this will depreciate the dollar, reduce the current account imbalance and probably have a deflationary effect in Japan. We can then suppose that Japan uses some combination of expansionary fiscal and monetary policy to restore internal balance. When fiscal policy is used the current account imbalance will be reduced further and when monetary policy is used it is likely to modify the initial effect--i.e., increase the current account imbalance through depreciating the yen.

If the U.S. authorities expected this Japanese policy reaction they could have taken it into account when they initially set their own policies. Alternatively, they might adjust their policies as the Japanese reaction becomes apparent. In any case, there is no compatibility problem provided the Japanese have only an internal balance target but do not have a current account target of their own.

But, suppose the Japanese did have a current account target, and that their target was to avoid any reduction in the current account surplus while still consistently maintaining internal balance. As noted above, the first impact of the U.S. policy change is to reduce the Japanese surplus and produce deflation. To get back to internal balance and their own current account target the Japanese could again use a combination of fiscal and monetary policy. Some monetary expansion combined with fiscal contraction (both depreciating the yen) would probably be needed--in fact the same policies as the United States had engaged in. One could then imagine the United States following with more fiscal contraction and monetary expansion to get the dollar down again, and envisage a process of competitive depreciation through competition in fiscal restraint and monetary expansion. But this is a fanciful story and a natural solution would be to have policy coordination or an agreement designed to establish compatible current account targets.

The question really is whether it is sensible for countries to have current account targets which then require to be set by mutual agreement. An alternative view, to which I incline, is that they might have budget deficit targets, depending on various "structural" or optimal public borrowing considerations (which should not really be independent of world interest rates), and perhaps some kind of internal balance targets, roughly defined. But current accounts and real exchange rates should emerge out of the international general equilibrium system. 1/

1/ In the discussion in Section III of the Mundellian fiscal-monetary policy mix approach (applying to a fixed exchange rate regime) it was concluded that sustained budget deficit and current account outcomes could not be ignored. If the argument here is accepted one might argue that the basic problem would be a sustained fiscal deficit, the current account outcome just being a by-product.

This approach is worth spelling out. Let us suppose that there is a reduction in the U.S. deficit but no change in the fiscal policies of other countries. Exchange rates are flexible and monetary policies aim to maintain domestic demand. The reduced U.S. deficit would lower world interest rates and stimulate or "crowd-in" private investment in many countries (supported, if necessary, by some monetary expansion). If the increased investment took place mainly in the United States, the U.S. current account might stay in large deficit. Otherwise the location of the current account deficits or reduced surpluses elsewhere that are needed to make possible a lower U.S. deficit would depend on where the new investment opportunities emerged. Countries where investment greatly increased would go into deficit. The pattern of current account balances resulting from the U.S. fiscal contraction would thus be determined by the market. It would not be necessary to allocate or coordinate changes in current account balances in advance. Of course there may still be scope for some fiscal and monetary policy coordination--or at least mutual policy modification--to avoid undue fluctuations or sudden changes in real exchange rates. This would have to be done at the cost of some departure either from the internal balance targets or from the fiscal policy targets set by optimal public borrowing considerations. 1/

VIII. Conclusion

I have simply assumed here the validity or relevance of domestic Keynesianism and taken off from there. For those who believe that Kenynesian demand management policies are still relevant or useful for the short run but not the medium or long run the whole discussion should then be interpreted as referring only to this short-run.

The first step was to expound the familiar fixed exchange rate international Keynesianism Mark I, showing that if the current account is a constraint expansion in one country depends on expansion by others. In the presence of an international capital market, this conclusion has to be modified somewhat since current account imbalances can be financed for a time by the capital market (the Mundellian fiscal-monetary policy mix approach) but budget deficit and current account effects still cannot be ignored. It was then shown that the case for international Keynesianism Mark I seems to disappear once flexible exchange rates are allowed for, since countries could expand unilaterally while keeping their current accounts in balance or at a desired level.

The role of real wages in The General Theory and the relevance of real wages for the Keynesian recommendations were then introduced. This led to international Keynesianism Mark II, applying to a flexible exchange rate world. Unilateral expansion is now possible: there is no balance

1/ I have discussed this issue of fiscal policy coordination to affect real exchange rates--in a model where monetary policy is targeted on domestic conditions--more fully in Corden (1986).

of payments constraint as in the simplest Mark I version. But unilateral expansion involves exchange rate depreciation, and hence a cost, namely deteriorating terms of trade and real wages. This cost can be avoided or modified by other countries expanding at the same time. One country's expansion shifts the inflation-unemployment trade off of its trading partners in a favorable direction. This then led to one particular version of the international macroeconomic policy coordination concept, namely "mutual policy modification" in the interests of expansion. With positive transmission a large expanding economy is a "locomotive" for others.

Finally, other versions of the coordination concept have been discussed, namely information exchange--which is necessary if countries wish to maintain internal balance when there are policy shocks emanating from other countries--and current account compatibility, which raises important issues that arise even when domestic and international Keynesianism do not apply at all.

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